

Blue Carbon Collaborative (BCC) Meeting #5

Wednesday June 22, 2022

3:00 pm – 5:00 pm PST

Summary Notes

For a complete recording of the meeting, please watch the following recording: [HERE](#)

Presentation slides are linked in the notes below.

Meeting Agenda:

3:00pm	Welcome, Roll Call, Review Agenda
3:10pm	Updates <ul style="list-style-type: none"> • Project updates and developments (all) • CARB 2022 Scoping Plan Update and NGO sign-on letter (Pew)
3:40pm	Panel Presentations and Q & A “Best Practices for Blue Carbon Accounting” <ul style="list-style-type: none"> • Dr. Lisa Beers, <i>Silvestrum Climate Associates, Senior Associate</i> • Professor Catherine Lovelock, <i>The University of Queensland, Georgina Sweet Australian Laureate Fellow</i> • Dr. Matthew Costa, <i>Center for Climate Change Impacts and Adaptation, Scripps Institution of Oceanography, University of California San Diego, Postdoctoral Scholar</i> <p><i>Questions and Discussion</i></p>
4:55pm	Next Steps
5:00pm	End of Meeting

Welcome

Lily Verdone from Coastal Quest welcomes participants to the meeting; reviews the agenda.

Updates

Project Updates and Developments (all)

- *Jamie*, brought on a climate intern and will be working with Ocean Protection Council (OPC) and Ocean Science Trust (OST) to make the tie between climate change and MPAs clearer
- *Heather*, the San Diego ports sampled 11 locations in a yearlong study to acquire baseline reports of Blue Carbon storage. The report will be out by the end of July and next year they plan on looking at bicarbonate pathways.
- *Neysa*, California Department of Fish and Wildlife (CDFW) has selected ESA as consultants for the final design and engineering of the southern portion of Ballona Wetlands Ecological Reserve. Permits should be out by 2024.

CARB 2022 Scoping Plan Update and NGO sign—on letter (Pew)

- *Gilly*, Overview of sign on letter drafted by Pew, [link](#) shared for organizations to sign on by 6/23
- *Melissa*, OST released a similar letter indicating the push for the inclusion of all wetland habitats is important.

Panel Presentations and Q & A “Best Practices for Blue Carbon Accounting”

For a complete recording of the meeting please see [HERE](#).

Dr. Lisa Beers

Power Point presentation available [HERE](#).

Presentation Highlights:

- Compliance Carbon Markets are motivated by compliance with Green House Gas (GHG)
 - Currently tidal wetland restoration is not eligible when generating offsets
- Voluntary Markets are typically motivated by corporate social responsibility
 - Companies buy carbon credits from restoration groups
 - Verified Carbon Storage (VCS) accounts for more than 50%
 - Tidal wetland restoration is eligible under many markets including VCS
- VCS methodology must account for SLR and erosion, biomass, soil removal and emission, prescribed burning, fossil fuels burned, and all must be accounted in baseline scenarios and project scenarios
- United States National GHG Inventory methods include knowing how much carbon is being emitted as well as the emission factors
- Summary
 - In 2020, 20,000 acres of coastal wetlands sequestered about 39 kt of emissions. Approximately the equivalent of 8,600 passenger vehicles.
 - Additionally, about 72,000 acres of non-tidal or muted brackish wetlands in San Francisco (SF) Bay accounted for 100kt of emissions.
 - Wetlands in the SF Bay estuary are sequestering a large amount of carbon and there is the potential to expand for more carbon projects in the area.

Professor Catherine Lovelock

Power Point presentation available [HERE](#).

Presentation Highlights:

- Coastal wetlands are comprised of multiple ecosystems that change over time; elevation can be used as a proxy to determine how sea level rise will affect wetland ecosystems as they change
- Data sources and approaches
 - Modeled approaches measure the change in ecosystems
 - Regional approaches are based on variation in climate and tidal range

- Project implementation
 - Land is broken into Carbon Estimation Areas (CEA)
 - Excel tool has been developed called “Blue CAM” which estimates project abatement for reporting
- Next steps
 - Pilot projects and understanding maps of opportunities based on biophysical characteristics and more
 - Government has been looking to see how they can verify projects
 - Development of other methods
 - Not all landholders can use tidal restoration method
 - Avoid soil disturbance since it has caused lots of problems in Northern Australia

Dr. Matthew Costa

Power Point presentation available [HERE](#).

Presentation Highlights:

- Gathered baseline data from three estuaries
- Initial Findings
 - San Dieguito Lagoon (SDL)
 - High sequestration potential unmet
 - Sediment delivery and plant burial is not occurring at the highest potentials
 - Mission Bay (MB)
 - Significant value, spatially variable
 - Shows importance of gathering data to get the overall picture
 - Famosa Slough (FS)
 - Belowground landscape shares Carbon Pool
 - The deeper the sediment, the more carbon sequestration
- Insights on San Diego Blue Carbon (restricted wetland areas)
 - Eelgrass beds are typically more understood and mapped than other Blue Carbon ecosystems
- What’s Next
 - Growing interest in kelp for carbon sequestration
 - Local observations around La Jolla Canyon

Questions and Discussion for Panelists

- *Isabelle*, since global CO₂ has gone up with increased industry use, have rates of carbon sequestration also gone up?
 - *Catherine*, some chamber experiments have shown allocation to roots increase when CO₂ increases. Using historical records, some species such as mangroves respond more than others, however, the changing hydrology from sea level rise will have more of an impact on the rates of carbon sequestration.

- *Jena*, are any of the speakers sizing the financial market for their specific project? Is anyone else monetizing theirs?
 - *Lisa*, coastal Carbon credits are grossly under monetized.
 - *Catherine*, in Australia, the government buys carbon credits for \$30 a ton. They know that this is not enough to make a Blue Carbon project profitable.
- *Lily*, is there a lot of Blue Carbon data gaps in Southern California. How would they need to be prioritized?
 - *Matthew*, smaller river lagoons and systems are overall less pristine, smaller fractions of the coastline, and geographical facts associated with these regions.
 - *Chris*, researchers tend to focus on larger coastal regions. Tidal flats have been understudied and notably they hold about the same amount of carbon as sea grass meadows.
 - *Lisa*, the largest data gaps are centered around knowing where the right threshold is for local methane data. Another data gap aspect is how to incorporate restoration sites into the inventory.
- *Lily*, can you remind us what steps are needed to restore areas of Blue carbon?
 - *Lisa*, hydrology is super important. If it's in an area that needs a large amount of sediment supply, it's important to know that before you start
 - *Matthew*, moving and restoring earth to fix hydrology is time consuming and very expensive
 - *Catherine*, passive regeneration of wetlands is key

Next Steps

- Save the Date
 - Sept 21st is the next meeting where the focus will be “Messaging Blue Carbon”

Attendees

Lily Verdone –Coastal Quest
Scarlett Schroeder –Coastal Quest
Tegan Hoffmann –Coastal Quest
Jamie Blatter – MPA Collective Network
Carol Kerridge – Del Mar Lagoon Committee
Dwight Wodon –City of Del Mar
Jena Thompson- Ocelot Company
Gilly Lyons – Pew Charitable Trusts
Udo Wahn- Del Mar Lagoon Committee; Surfrider, San Diego
Matthew Costa –Scripps Institution of Oceanography
Ashley Eagle Gibbs –Environmental Action Committee
Catherine Lovelock –University of Queensland
Lisa Beers – Silvestrum Climate Associates
Melissa Ward- San Diego State
Kristina Vaculik – Resident of Imperial Beach
Michael Quill –Los Angeles Waterkeeper



Hayley Salazar – South Bay Sustainable Communities, San Diego
Heather Kramp- Port of San Diego
Cyndi Dawson – Castilian Environmental; Contractor for Q Charitable Trust
Walden Kiker- Port of San Diego
Jim Peugh –San Diego Autobon Society
Chris Janousek –Oregon State
Neysa Frechette – Friends of Ballona
Jasmine Dagostino –Pew Charitable Trusts
Isabelle Kay – University of California Natural Reserve System
Jason Jones – US Navy